CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 97-048
UPDATED WASTE DISCHARGE REQUIREMENTS
AND RECISION OF ORDER NO. 78-65 FOR:

CLOSED HALF MOON BAY LANDFILL
COUNTY OF SAN MATEO
CITY OF HALF MOON BAY, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

DISCHARGER & SITE LOCATION

1. The Half Moon Bay Landfill is owned by San Mateo County, the site's legal owner, hereinafter referred to as the discharger. The site is located on an ocean-front marine terrace approximately one-mile southwest of the intersection of State Highway 92 and State Highway 1 as shown on Figure 1. No waste has been disposed of at the site since 1976. The landfill is currently classified as a closed Class III landfill.

PURPOSE OF UPDATE ORDER

2. The primary objectives of this order are to implement a surface water monitoring program, to characterize the nature and extent of landfill leachate, to evaluate if landfill gas is a concern at the site, to require regrading of the site to promote runoff and reduce ponding, and to bring the site into compliance with the appropriate regulations of Articles 5 and 8, Title 23, Division 3, Chapter 15 of the California Code of Regulations.

SITE DESCRIPTION

3. The landfill is a closed, unlined Class III solid waste disposal site located on a coastal bluff adjacent to the Pacific Ocean. The landfill occupies an approximately 14 acre parcel owned by San Mateo County. The land is currently open space maintained by the San Mateo County Park Department. Land use within 1,000 feet of the site is agricultural, residential and recreational.

SITE HISTORY

4. The landfill operated from 1962 until 1976 and accepted primarily inert material, yard waste and lesser amounts of residential trash. Based on historic records, the landfill was originally intended to fill a gully in the Arleta Park area overlooking the ocean, thereby reclaiming land for eventual park and recreational use. The landfill was graded and capped in 1978 pursuant to Board Order No. 78-65.

Wave action has eroded portions of the marine terrace. In the early 1990's this erosion exposed landfill waste along the cliff face. The County of San Mateo subsequently repaired the eroded areas by regrading the slope and installing a concrete block/ steel chain mat.

GEOLOGY

5. The landfill overlies Quaternary Age marine terrace deposits of weakly consolidated, slightly weathered sand and gravel. Underlying the marine terrace deposits is the Pliocene age Purisima Formation which consists of well indurated marine sandstones and siltstones.

6. The marine terrace deposits dip shallowly to the north. The closest active fault is the northwest trending Seal Cove Fault, located about one-mile offshore.

SURFACE WATER AND GROUNDWATER

7. Surface water discharges to the Pacific Ocean from three onsite locations (1) a drainage channel that forms the southern boundary of the site,(2) a drain outlet along the northern portion of the concrete revetment mat and (3) a drain outlet along the southern portion of the concrete revetment mat.

8. The landfill is located along the western edge of the Half Moon Bay Terrace Groundwater Basin. Groundwater flow beneath the site is believed to be to the west toward the Pacific Ocean. The Purisima Formation appears to act as a barrier to downward movement of groundwater, creating perched water conditions in the overlying terrace deposits and surficial materials. During the wet season, terrace and surficial materials are saturated and discharge water to the Pacific Ocean.

   Areas at greater risk for potential groundwater degradation are the marine terrace deposits. However, given the proximity of the Pacific Ocean to the site, groundwater development appears unlikely due to potential pumping-induced saltwater intrusion. Historical records indicate that the closest groundwater well was about 3000 feet from the landfill. Task 3 requires a submittal of an updated well search.

9. No groundwater monitoring wells have been installed at the site. A Solid Waste Assessment Test report for the site is not required until 2004. In 1989, when the priority rankings for the Solid Waste Assessment Test Investigations were developed, the Half Moon Bay Landfill was placed in the lowest priority SWAT rank (Rank 15 of 15). No new information about the site indicates that a higher priority ranking is warranted.

10. BASIN PLAN - The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995 This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resource Control Board and the Office of the Administrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

11. BENEFICIAL USES - The Beneficial Uses of the Half Moon Bay Terrace Groundwater Basin include Municipal and Domestic Water Supply, Industrial Water Supply, and Agricultural Water Supply.

    The Beneficial Uses of the Pacific Ocean include:

    a. Marine habitat;

    b. Contact and Non-contact water recreation;

    c. Commercial and Sports Fishing;

    d. Shell fish harvesting; and

    e. Preservation of rare and endangered species.

MONITORING PROGRAM

12. The discharger is required to conduct semi-annual surface water monitoring as described in the attached Discharge Monitoring Program, Parts A & B.

13. The discharger is required to monitoring for the parameters presented in Table A of the attached Discharge Monitoring Program.

CALIFORNIA ENVIRONMENTAL QUALITY ACT.

14. This site is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15301, Title 14 of the California Code of Regulation. However, any subsequent development of the closed landfill may not be exempt from CEQA.

15. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharger and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

16. The Board, in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that The County of San Mateo, its agents, successors and assigns shall meet the applicable provisions contained in Title 23, Division 3, Chapter 15 of the California Code of Regulations and Division 7 of the California Water Code and shall comply with the following:

A. PROHIBITIONS

1. Waste shall not be in contact with ponded water from any source whatsoever.

2. No further waste shall be deposited or stored at this site.

3. Leachate from waste and ponded water containing leachate or in contact with solid wastes shall not be discharged to waters of the State or of the United States.

4. The discharger, or any future owner or operator of the site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:

    a. Surface Waters

        1. Floating, suspended, or deposited macroscopic particulate matter or foam.

        2. Bottom deposits or aquatic growths.

        3. Alteration of temperature, turbidity, or apparent color beyond natural background levels.

        4. Visible, floating, suspended or deposited oil or other products of petroleum origin.

        5. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these

unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

b. Groundwater

Groundwater shall not be impacted as a result of solid waste degradation.

B. SPECIFICATIONS

1. All reports pursuant to this order shall be prepared under the supervision of a registered civil engineer, California registered geologist or certified engineering geologist.

2. The site shall be protected from any washout or erosion of wastes or covering material and from inundation which could occur as a result of a 100 year 24 hour precipitation event, or as the result of flooding with a return frequency of 100 years.

3. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes during the life of the site.

4. The discharger shall assure that the foundation of the site, the solid waste fill, and any present or future structures which control leachate, surface drainage, erosion and gas are constructed and maintained to withstand conditions generated during the maximum probable earthquake.

5. The exterior surfaces (cap) shall be maintained to promote lateral runoff of precipitation and to ensure that ponding does not occur.

6. The discharger shall analyze surface water samples from stations listed in the Self-Monitoring Program on a semi-annual basis for parameters listed in Table A of the Discharge Monitoring Program.

7. In the event of a release of a constituent of concern beyond the Point of Compliance, the site begins a Compliance Period (Sect. 2550.6(a)). During the Compliance Period, the discharger shall perform an Assessment Monitoring Program and a Corrective Action Program.

8. The discharger shall install any reasonable groundwater and leachate monitoring devices required to fulfill the terms of any Discharge Monitoring Program issued by the Executive Officer.

9. Landfill gases shall be adequately vented, removed from the landfill, or otherwise controlled to minimize the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose (unsaturated) zone.

10. The discharger shall maintain all devices or designed features, installed in accordance with this order such that they continue to operate as intended without interruption as provided for by the performance standards adopted by the California Integrated Waste Management Board.

11. The discharger shall provide a minimum of two surveyed permanent monuments near the landfill from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the operation and post-closure maintenance period. These monuments shall be installed by a licensed land surveyor or registered civil engineer.

12. The Regional Board shall be notified immediately of any failure occurring in the waste management unit. Any failure which threatens the integrity of containment features or the landfill shall be promptly corrected after approval of the method and schedule by the Executive Officer.

13. The discharger shall comply with all applicable provisions of Chapter 15 that are not specifically referred to in this Order.

14. The discharger shall maintain the facility so as to prevent a statistically significant increase in water quality parameters at points of compliance as provided in Section 2550.5.

C. PROVISIONS

1. The discharger shall comply with all Prohibitions, Specifications and Provisions of this Order.

2. The discharger shall submit a **Landfill Gas Investigation Workplan**, acceptable to the Executive Officer, that at a minimum includes a plan to collect gas samples on a 200 feet grid within the landfill foot print and along the perimeter of the landfill.

REPORT DUE DATE: September 15, 1997

3. The discharger shall submit the results of a **Landfill Gas Investigation**, acceptable to the Executive Officer, as outlined in the above Landfill Gas Investigation Workplan.

REPORT DUE DATE: 90 days after Regional Board staff approval of the Landfill Gas Investigation Workplan.

4. The discharger shall submit a **Grading Plan**, acceptable to the Executive Officer, that includes a plan and schedule for filling areas of the landfill that have subsided.

REPORT DUE DATE: September 15, 1997

5. The discharger shall submit a report, acceptable to the Executive Officer, that documents **Completion of Grading** activities necessary to fill areas of the landfill that have subsided.

REPORT DUE DATE: 18 months after Regional Board staff approval of the Grading Plan submitted above.

6. The discharger shall submit a report, acceptable to the Executive Officer, that documents completion of a **Well Search**. Such a report shall include a review of San Mateo County records for groundwater wells within 3000 feet of the landfill and the results of a door-to-door survey for all homes within 1000 feet of the boundary of the landfill. The report shall include a map showing the location of the well, well depth, and well use.

REPORT DUE DATE: July 15, 1997

7. The discharger shall submit semi-annual monitoring reports by April 30 for the winter/spring reporting period and October 30 for the summer/fall reporting period of each year in accordance with the attached Updated Discharge Monitoring Program. By April 30 of each year the discharger shall also submit an annual report to the Board, which may be combined with the semi-annual report due at the same time, covering the previous calendar year as described in Part A of the Updated Discharge Monitoring Program.

REPORT DUE DATE: **SEMI-ANNUAL Reports due APRIL 30 AND OCTOBER 30 OF EACH YEAR.**
ANNUAL Report may be combined with semi-annual report due APRIL 30 OF EACH YEAR

8. The discharger shall submit appropriately detailed maps, acceptable to the Executive Officer, showing the following:
   i. limit of waste in relation to the discharger's property boundary, the Pacific Ocean, and public roads.
   ii. location of surface water sampling stations
   iii. an updated topographic map at a scale of one inch equals one-hundred feet.

REPORT DUE DATE: September 15, 1997

9. The discharger shall submit a **Leachate Characterization Report**, acceptable to the Executive Officer, that includes the results of leachate samples collected from a minimum of eight locations within the landfill. Leachate samples shall be analyzed for total dissolved solids, general minerals, total cations and anions, ammonia, pH, and EPA Method 8260. The thickness of the landfill cover and depth to leachate shall be measured and reported during this investigation. At least four locations shall be converted to permanent leachate monitoring wells. The investigation shall generally follow the specifications, parameters and protocols outlined in the State Water Resources Control Board's Technical Guidance Manual for the Solid Waste Water Quality Assessment Test August, 1988 and Cal EPA's 1994 Guidance Manual for Ground Water Investigations.

REPORT DUE DATE: December 15, 1997

10. All reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.

11. The discharger shall file with the Regional Board Discharge Monitoring Reports performed according to any Discharge Monitoring Program issued by the Executive Officer.

12. The discharger shall immediately notify the Board of any flooding, equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures.
REPORT DUE DATE: IMMEDIATELY UPON DISCOVERY

13. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of the waste discharged or related operations.

14. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350).

15. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). (H & SC Section 5411, CWC Section 13263)

16. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgment that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]

17. REVISION

These waste discharge requirements are subject to review and revision by the Regional Board. [CWC 13263]

18. OMISSIONS AND CORRECTIONS

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. [CWC Sections 13260 and 13267]

19. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. (CWC Section 13263(g)]

20. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of these requirements shall not be affected. [CWC 9213]

21. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this order.

22. REPORTING OF HAZARDOUS SUBSTANCE RELEASE

If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the discharger shall report such discharge to the Regional Board by calling (510) 286-1255 during regular office hours (Monday through Friday, 8:00 to 5:00).

A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

23. ENTRY AND INSPECTION

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this order;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this order;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

(d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this order or as otherwise authorized by the California Water Code, any substances or parameters at any location. [CWC Section 13267]

24. MONITORING DEVICES

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurements devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Officer a written statement signed by a registered professional engineer certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The Regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230]

25. TREATMENT

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. (CWC Section 13263(f)]

26. DISCHARGES TO NAVIGABLE WATERS

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to Section 404 of the Clean Water Act and discharge subject to a general NPDES permit) must file an NPDES permit application with the Regional Board. (CWC Section 13376)

27. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive officer.

Records of monitoring information shall include:

(a) The date, exact place, and time of sampling or measurements;
(b) The individuals who performed the sampling or measurements;
(c) The date(s) analyses were performed.
(d) The individuals who performed the analyses;
(a) The analytical techniques or method used; and
(f) The results of such analyses.

28. (a) All application reports or information to be submitted to the Executive officer shall be signed and certified as follows:

(1) For a corporation -- by a principal executive officer or at least the level of vice president.

(2) For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency -- by either a principal executive officer or ranking elected official.

(b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:

(1) The authorization is made in writing by a person described in paragraph (a) of this provision.

(2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and

(3) The written authorization is submitted to the executive officer.

Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]

29. PREVIOUS ORDERS:

Order No. 78-65 is hereby rescinded.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 16, 1997.

Loretta K. Barsamian
Executive Officer

Attachments: A. Location Map
B. Site Map
C. Discharge Monitoring Program

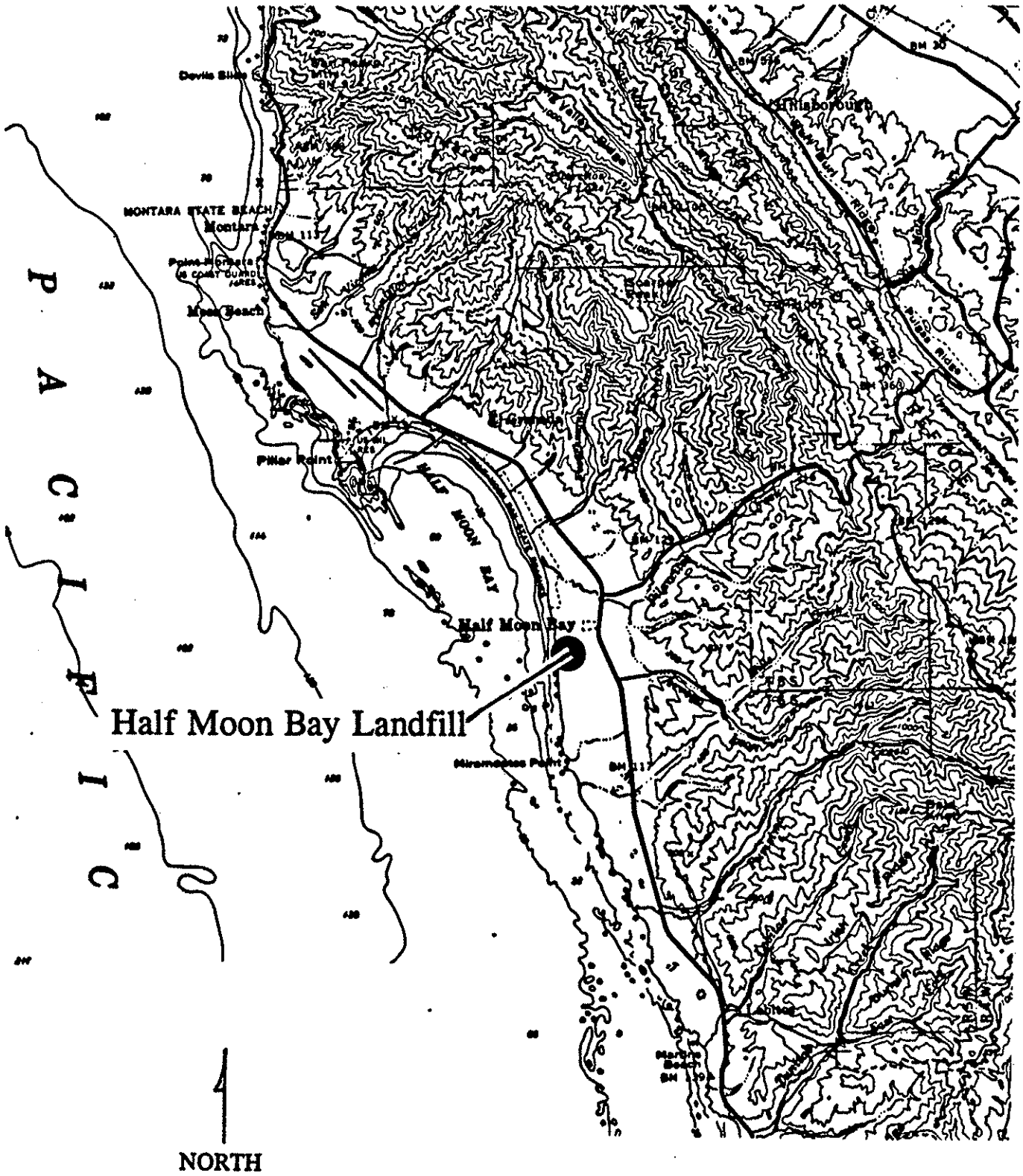

Figure 1. Location Map - Half Moon Bay Landfill, San Mateo County.

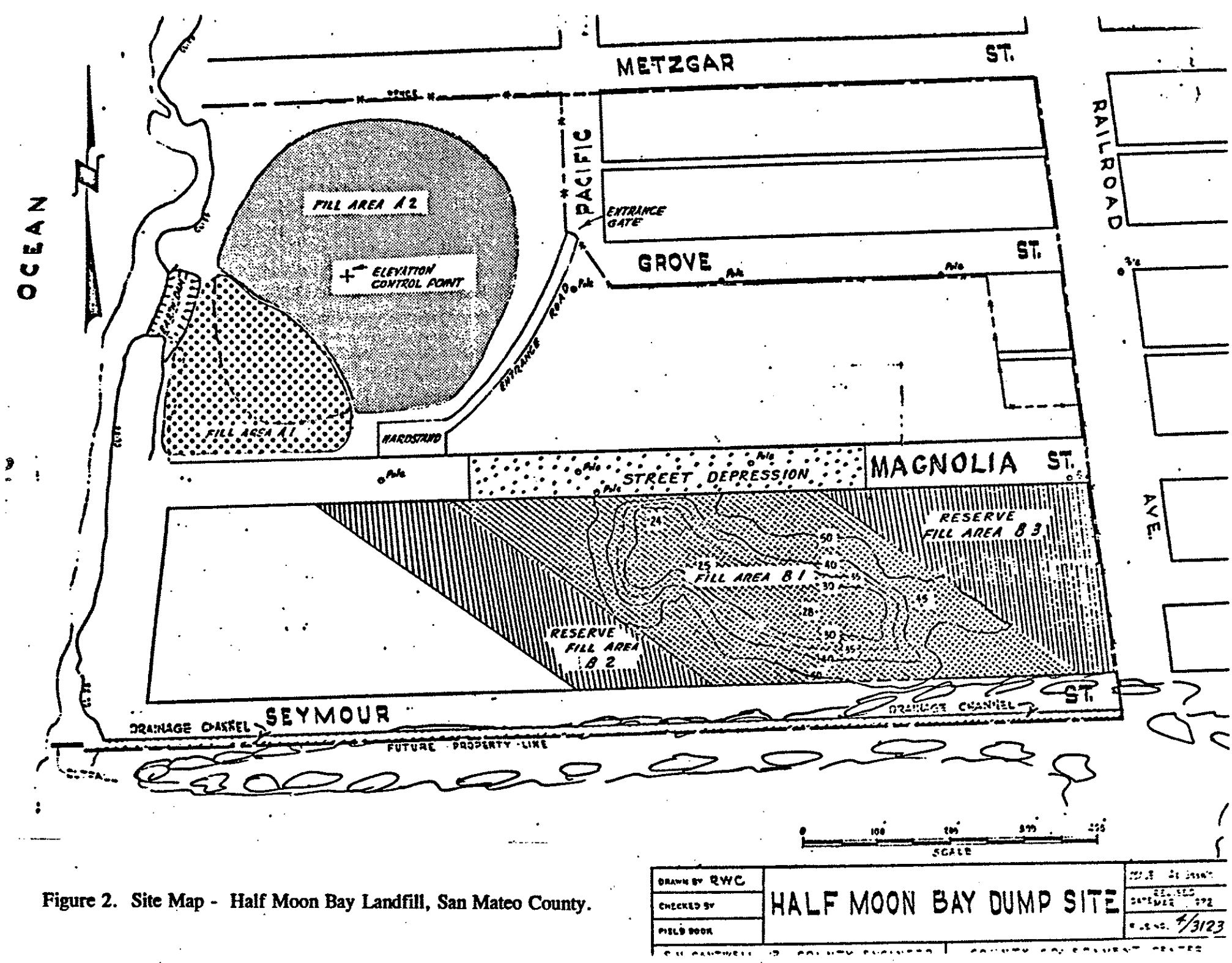

Figure 2. Site Map - Half Moon Bay Landfill, San Mateo County.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

UPDATED
DISCHARGE MONITORING PROGRAM

FOR
HALF MOON BAY LANDFILL
COUNTY OF SAN MATEO
SAN MATEO, SAN MATEO COUNTY

ORDER NO. 97-048

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Discharge Monitoring Program is issued in accordance with Chapter 15, Article 5.

The principal purposes of a discharge monitoring program are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of standards of performance, and toxicity standards, (4) to assist the discharger in complying with the requirements of Article 5, Chapter 15 as revised July 1, 1991.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.

2. Receiving waters refers to any surface water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill areas, the surface runoff from the site, are considered receiving waters.

3. Standard observations refer to:

a. Receiving Waters

1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
2) Discoloration and turbidity: description of color, source, and size of affected area.
3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
4) Evidence of beneficial use: presence of water associated wildlife.
5) Estimated Flow rate.
6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. Perimeter of the waste management unit.

1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3) Evidence of erosion and/or daylighted refuse.

c. The waste management unit.

1) Evidence of ponded water at any point on the waste management unit.
2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3) Evidence of erosion and/or daylighted refuse.
4) Standard Analysis and measurements are listed on Table A (attached)

D. SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analyses, and observations in the following media:

1. Groundwater per Section 2550.7(b) and
2. Surface water per Section 2550.7(c)

and per the general requirements specified in Section 2550.7(e) of Article 5, Chapter 15. The Regional Board is requiring semi-annual sampling for this Discharge Monitoring Program.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.

2. Date and time of sampling.

3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.

5. Calculation of results.

6. Results of analyses, and detection limits for each analysis.

F. REPORTS TO BE FILED WITH THE BOARD

1. Written detection monitoring reports shall be filed by the 30th day of the month following the report period. In addition an annual report shall be filed as indicated in F.3 below. The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

b. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:

1) A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.

2) The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.

3) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations.

c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations. At a minimum the map submitted with the Annual Report, due April 30th of each year, shall be a topographic map at a scale of one-inch equals one-hundred feet. For the map submitted with the Semi-Annual Report, due October 30th of each year, the discharger may substitute a legible 81/2" X 11" site map.

d. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer prior to use.

2) In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery

rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

e. An evaluation of the effectiveness of the leachate monitoring or control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

f. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.

2. CONTINGENCY REPORTING

a. A report shall be made by telephone of any seepage with a flow rate exceeding 5 gallons per minute from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

1) a map showing the location(s) of discharge;
2) approximate flow rate;
3) nature of effects; i.e. all pertinent observations and analyses; and
4) corrective measures underway or proposed.

b. A report shall be made in writing to the Board within seven days of determining that a statistically significant difference occurred between a down gradient sample and California and Federal Drinking Water Standards (Maximum Contaminant Levels, MCLs). Notification shall indicate what MCLs has/have been exceeded. The discharger shall immediately resample at the compliance point where this difference has been found and re-analyze.

c. If resampling and analysis confirms the earlier finding of a statistically significant difference between monitoring results and MCLs the discharger must submit to the Board an amended Report of Waste Discharge as specified in Section 2550.8(k)(5) for establishment of an Evaluation Monitoring Program (EMP) meeting the requirements of Section 2550.9 of Chapter 15.

d. Within 180 days of determining statistically significant evidence of a release, submit to the regional board an engineering feasibility study for a Corrective Action Program (CAP) necessary to meet the requirements of Section 2550.10.

At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern.

3. REPORTING

By April 30 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. The annual report may incorporate the second semi-annual report of the previous year. The annual report shall contain:

a. Tabular and graphical summaries of the monitoring data obtained during the previous year; the report should be accompanied by a 3 1/2" computer data disk, MS-DOS ASCII format, tabulating the year's data.

b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

c. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.

d. An evaluation of the effectiveness of the leachate monitoring/control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

4. WELL LOGS

A boring log and a monitoring well construction log shall be submitted for each new sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. ON-SITE OBSERVATIONS - Report Semi-annual

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-'n'	Located on the waste disposal area as delineated by a 500 foot grid network.	Standard observations for the waste management unit.	Quarterly
P-1 thru (perimeter)	Located at intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard for the perimeter.	Quarterly
L-1 thru L-'n'	At each point of discharge. Include a map indicating locations of discharge(s)	Standard test as outlined on Table A.Grab sample taken from seeps with flow rates exceeding 5 gpm.	Upon Discovery

B. SURFACE WATER MONITORING - Report Semi-annual

Surface water shall be monitored as outlined below and on Table A (Attached).

SW-1 At an upstream point in the drainage channel that forms the southern boundary of the site. At least 100 feet upstream of the edge of waste.

SW-2	At a downstream point in the drainage channel that forms the southern boundary of the site and prior to discharge to the beach.
SW-3	At the drain outlet along the northern portion of the concrete revetment mat
SW-4	At the drain outlet along the southern portion of the concrete revetment mat.

C. LEACHATE MONITORING WELLS - Report Semi-annual

Permanent leachate wells as outlined in Provision C.8. shall be monitored as follows:

Wells LW-1 through LW-n Measure leachate levels on a quarterly basis.

D. FACILITIES MONITORING

The Discharger shall inspect all facilities to ensure proper and safe operation once per quarter and report semi-annually. The facilities to be monitored shall include, but not be limited to:

a. Perimeter diversion channels and
b. Leachate Management facilities and secondary containment.

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 97 - 048.

2. Is effective on the date shown below.

3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer.

Loretta K. Barsamian
Executive Officer

Date Ordered: April 16, 1997

Attachment: Figure 1 - Location Map
Figure 2 - Site Map
Table A - Schedule for Sampling, Measurement, and Analysis

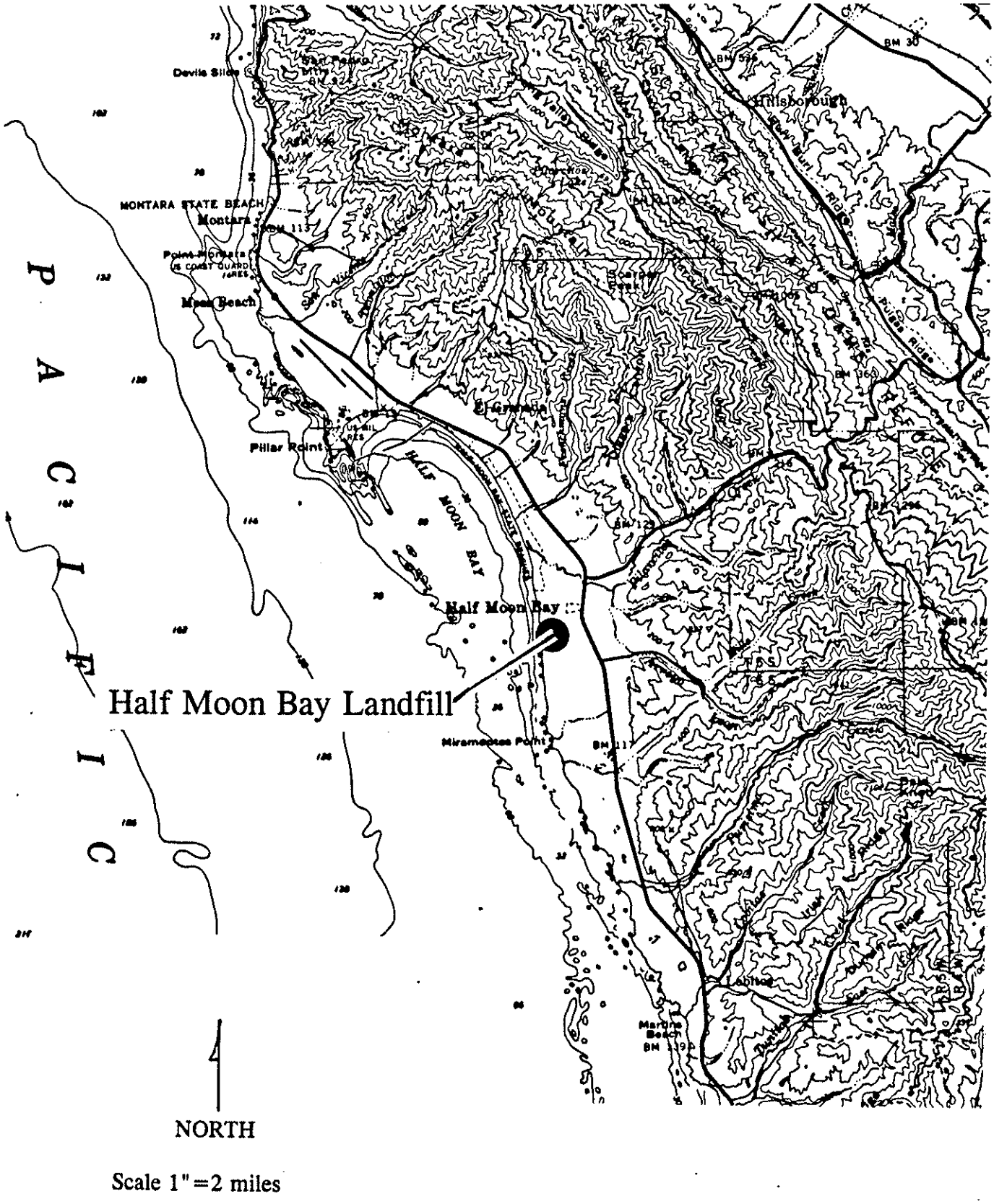

Figure 1. Location Map - Half Moon Bay Landfill, San Mateo County.

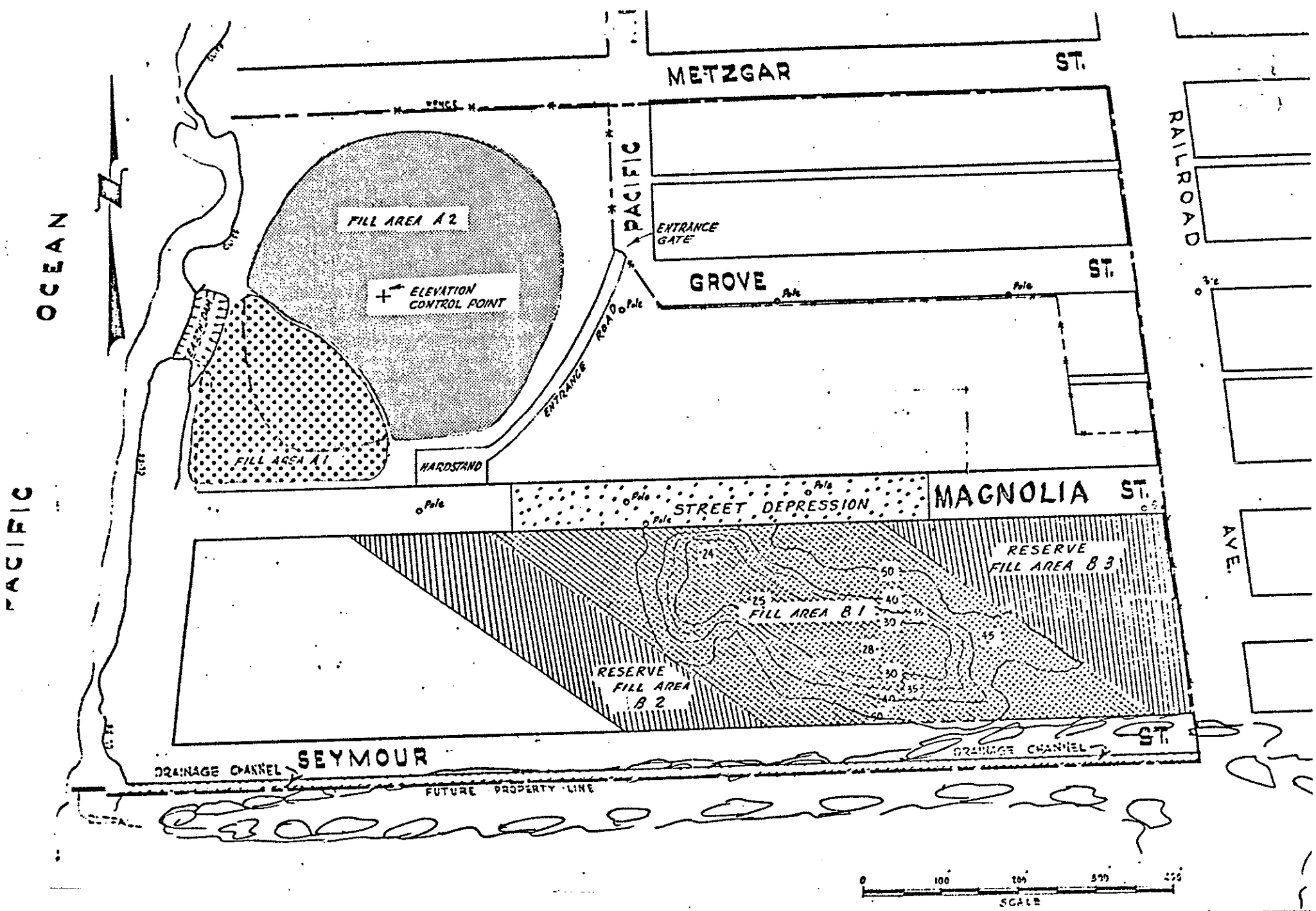

Figure 2. Site Map - Half Moon Bay Landfill, San Mateo County.

Table A

HALF MOON BAY LANDFILL
COUNTY OF SAN MATEO

Schedule for Sampling, Measurement and Analysis

Station Number	Constituent	Frequency
SW-1, 2, 3 and 4	Field Parameters (pH, Temperature, electrical conductivity and turbidity)	Semi-annually and collected such that samples are not collected closer than 5 months apart
	Ammonia	
	Total Dissolved solids	
	Biological Oxygen Demand	
	Chemical Oxygen Demand	
	Chloride	
	Nitrate as nitrogen	
	Sulfate	
	Estimate Flow Rate	
LW-1 through LW-n	Field Parameters (pH, Temperature, electrical, conductivity, turbidity)	Quarterly
	Leachate level	